

Sustainable Schools Program



Small Steps. Smart Choices. climatechoices.act.gov.au/schools-program

Educating and engaging young people in sustainability empowers them to make decisions and act for a sustainable future. Sustainability is one of the three crosscurriculum priorities in the Australian Curriculum. This means that sustainability is a study priority for Australian students, and that teachers and schools can use it to connect and relate aspects of curriculum content across learning areas and subjects.

Research shows that when the curriculum is relevant to students' own community, more learning is more likely. Participating in the Sustainable Schools program provides students with a real life purpose and context for learning the knowledge, skills, values and world views which will equip them to develop sustainable patterns of living and take action to maintain their own well-being as well as that of the environment.

Sustainability education is not about learning additional content – it's using the content of the learning areas of the Australian Curriculum to learn about sustainability, and using sustainability as a context for learning the knowledge, understanding and skills required by the learning areas of the Australian Curriculum. Schools which have a sequenced plan for the delivery of sustainability education will achieve better long term learning outcomes for students in relation to sustainability.

The learning areas and subjects of the Australian Curriculum can be divided into two groups:

- 1. those which develop students' knowledge, understanding and skills directly related to sustainability (learning about sustainability)
- 2. those in which sustainability can provide a context for students to learn important skills (learning through sustainability).

Students can learn about sustainability in Science, Humanities and Social Sciences, Technologies and Health and Physical Education. They engage with the ideas that are fundamental to understanding sustainability, such as the needs of living things; what and where resources are; how the Earth has changed over time while learning skills such as researching, analysing and evaluating. The content descriptions of these learning areas include specific references to sustainability as well. Students can learn through sustainability in English, Mathematics, The Arts and Languages. In this group it's about the texts teachers choose to study with the class as they're learning to read and analyse text; the stimuli teachers choose as students are learning to write; the things they count and measure, the problems they solve and the data they tabulate and graph.

Curriculum Planning

Curriculum plans make explicit what students should learn, and what (and when) teachers should teach. The Australian Council of Education Research's (ACER's) National School Improvement Tool identifies a coherent, sequenced plan for curriculum delivery that is aligned with the Australian Curriculum as an important characteristic of effective schools.

The first step towards developing a curriculum plan is to use the achievement standards of the Australian Curriculum, against which schools report student learning to parents, to identify the desired results of a teaching and learning sequence. Armed with information about both the desired result and what their students already know, understand and can do, teachers then look to the content descriptions of the Australian Curriculum to identify what to teach.

This resource identifies specific content descriptions which provide opportunities for sequenced learning about sustainability, and the learning areas and subjects where teachers can teach learning area content via the context of sustainability. It identifies where teachers can deliver curriculum content at the same time as developing knowledge, understanding and skills relating to sustainability. The knowledge, understanding and skills related to sustainability are expressed as big understandings.

This resources links the Australian Curriculum to the Sustainable Schools Program's focus areas of

🜔 water 🚱 energy 🔇 waste and recycling and 📀 biodiversity and school grounds.

Learning about sustainability through water, waste, energy, and biodiversity

	Kindergarten	1	2	3	4	5	6
Science Biological sciences	Living things have basic needs, including food and water (ACSSU002)	Living things have a variety of external features (ACSSU017) Living things live in different places where their needs are met (ACSSU211)	Living things grow, change and have offspring similar to themselves (ACSSU030)	Living things can be grouped on the basis of observable features and can be distinguished from non-living things (ACSSU044)	Living things have lifecycles (ACSSU072) (S Living things depend on each other and the environment to survive (ACSSU073) (S	Living things have structural features and adaptations that help them survive in their environment (ACSSU043) 💽 <table-cell></table-cell>	The growth and survival of living things are affected by physical conditions of their environment (ACSSU094) ♥ ♥ ♥
Science Chemical Sciences	Objects are made of materials that have observable properties (ACSSU003)	Everyday materials can be physically changed in a variety of ways (ACSSU018) ()	Different materials can be combined for a particular purpose (ACSSU031) O	A change of state between solid and liquid can be caused by adding or removing heat (ACSSU046) ()	Natural and processed materials have a range of physical properties that can influence their use (ADSSU074) O	Solids, liquids and gases have different observable properties and behave in different ways (ACSSU077)	Changes to materials can be reversible or irreversible (ACSSU095) 🚺 🗲
Science Physical sciences		Light and sound are produced by a range of sources and can be sensed (ACSSU020)	A push or pull affects how an object moves or changes shape (ACSSU033)	Heat can be produced in many ways and can move from one object to another (ACSSU049)	Forces can be exerted by one object on another through direct contact or from a distance (ACSSU076)	Light from a source forms shadows and can be absorbed, reflected and refracted (ACSSU080)	Electrical energy can be transferred and transformed in electrical circuits and can be generated from a range of sources (ACSSU097)
Science Earth and space sciences	Daily and seasonal changes in our environment affect everyday life (ACSSU004) O O O O	Observable changes occur in the sky and landscape (ACSS019) O Ø Ø	Earth's resources are used in a variety of ways (ACSSU032) () () () () () () () () () () () () () (Earth's surface changes over time as a result of natural processes and human activity (ACSSU075) O O O O O	The Earth is part of a system of planets orbiting around a star (the sun) (ACSSU078)	Sudden geological changes and extreme weather events can affect the Earth's surface (ACSSU096) 💽 🍣

	Kindergarten	1	2	3	4	5	6
Science Use and influence of science		People use science in their caring for their environment (ACSHE022) & (ACSHE035)	daily lives, including when and living things	Science knowledge helps people to understand the effect of their actions (ACSHE051) & (ACSHE062) 🚺 🔗 📀 🔇		Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083) & (ACSHE100) 🚺 🏈 🔇	
HASS History		Differences and similarities between students' daily lives and life during their parents' and grandparents' childhoods (ACHASSK030) () () () () () () () () () () () () () (How changing technology affected people's lives (at home and in the ways they worked, travelled, communicated and played in the past) (ACHASSK046) (ACHASSK046)			The nature of convict or colonial presence, including the factors that influenced patterns of development, aspects of the daily life of the inhabitants (including Aboriginal Peoples and Torres Strait Islander Peoples) and how the environment changed (ACHASSK107) () (2) (3) (3) (4)	

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HASS Geography	The representation of the location of places and their features on simple maps and models (ACHASSK014)	The natural, managed and constructed features of places, their location, how they change and how they can be cared for (ACHASSK031) () (3) The weather and seasons of places and the ways in which different cultural groups, including Aboriginal and Torres Strait Islander Peoples, describe them (ACHASSK032) () Activities in the local place and reasons for their location (ACHASSK033) () (3) (3)		The main climate types of the world and the similarities and differences between the climates of different places (ACHASSK068)	The importance of environments, including natural vegetation, to animals and people (ACHASSK088)	The influence of people on the environmental characteristics of places in Europe and North America and the location of their major countries in relation to Australia (ACHASSK112)	

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HASS Economics and Business						The difference between needs and wants and why choices need to be made about how limited resources are used (ACHASSK119)	How the concept of opportunity cost involves choices about the alternative use of resources and the need to consider trade-offs (ACHASSK 149) (ACHASSK 149) (ACHASSK 149) (ACHASSK 149) (ACHASSK 150) (ACHASSK150) (ACHASSK150) (ACHASSK150)

	Kindergarten	1	2	3	4	5	6
Design and Technologies Knowledge and Understanding	Identify how people design and produce familiar products, services and environments and consider sustainability to meet personal and local community needs (ACTCEK001) ✓		Recognise the role of people in design and technologies occupations and explore factors, including sustainability that impact on the design of products, services and environments to meet community needs (ACTCEK010) () () () () () () () () () (Examine how people in design and technologies occupations address competing considerations, including sustainability in the design of products, services, and environments for current and future use (ACTCEK019) () () () () () () () () () (
Design and Technologies Processes and Production Skills	Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (ACTDEP005) (C (S) (C) (C) (C) (C) (C) (C)			Critique needs or opportunities for designing and explore and test a variety of materials, components, tools and equipment and the techniques needed to produce designed solutions (ACTDEP014) O O O O O Evaluate design ideas, processes and solutions based on criteria for success developed with guidance and including care for the environment (ACTDEP017) O O O O		Critique needs or opportu investigate materials, com equipment and processes designed solutions (ACTDEP024) \bigcirc	nities for designing, and ponents, tools, s to achieve intended sess that include design ideas, processes
Digital Technologies Processes and Production Skills						Explain how student solut information systems are s current and future local co (ACTDIP021)	ions and existing ustainable and meet ommunity needs

	Kindergarten	1	2	3	4	5	6
Health and Physical ducation	Participate in play that promotes engagement with outdoor settings and the natural environment (ACPPS007) ((3) (3)	Identify and explore natura in the local community whe take place (ACPPS023) 🚺 🧿 🔇	al and built environments ere physical activity can	Participate in outdoor games and activities to examine how participation promotes a connection between the community, natural land built environments, and health and wellbeing (ACPPS041) () (3) (3)		Explore how participation in outdoor activities supports personal and community health and wellbeing and creates connections to natural and built environments (ACPPS059) () (3) (3)	
	Explore actions that help make the classroom a healthy, safe and active place (ACPPS022) 🚺 🕢 😒 🔇			Describe strategies to make the classroom and playground healthy, safe and active spaces (ACPPS040) • • • • • • • • • • • • • • • • • • •			

Learning through water, waste, energy, biodiversity and sustainability

	Kindergarten	1	2	3	4	5	6		
	Teachers select issues, rules, bylaws and laws related to water, waste, energy, biodiversity and sustainability as students learn about civic participation, democratic process and governance (see relevant content descriptions below).								
HASS Civics and Citizenship				The importance of making decisions democratically (ACHASSK070) Who makes the rules, why rules are important and the consequences of rules not being followed (ACHASSK071) Why people participate within communities and how students can actively participate and contribute (ACHASSK072)	The role of local government and the decisions it makes on behalf of the community (ACHASSK091)	Why regulations and laws are enforced and the personnel involved (ACHASSK117) How people with shared beliefs and values work together to achieve a civic goal (ACHASSK118)	Where ideas for laws come from and how they become law (ACHASSK146) The obligations citizens may consider they have beyond their own national borders as active and informed global citizens (ACHASSK148)		
	Teachers select events and phenomena related to water, waste, energy, biodiversity for students to observe and investigate as they are learning about scientific process (see relevant content descriptions below).								
Science Nature and development of science	Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE013)	Science involves observin about, and describing cha events (ACSHE021) & (ACSHE034	g, asking questions nges in, objects and !)	Science involves making predictions and describing patterns and relationships (ACSHE050) & (ACSHE061)		Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions (ACSHE081) & (ACSHE098)			

	Kindergarten	1	2	3	4	5	6		
English	Teachers select texts, writing stimuli, vocabulary etc. related to water, waste, energy, biodiversity and sustainability as students are learning to read and view, write, speak and listen								
Mathematics	Teachers select problems for students to solve, items to measure, patterns to identify, data to organise, display, compare and analyse related to water, waste, energy, biodiversity and sustainability								
The Arts	Water, waste, energy, biodiversity and sustainability can provide thought-provoking contexts in which students can explore the nature of art making and responding								
Languages	Teachers select texts, writing stimuli, vocabulary etc. related to water, waste, energy, biodiversity and sustainability as students are learning to communicate and interact with others in other cultural contexts								